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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/663,265	09/15/2000	Asif Dawoodi Gandhi	7-16-10-14-33	3816

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HARNESS, DICKEY & PIERCE, P.L.C.
P.O. BOX 8910
RESTON, VA 20195

EXAMINER

APPIAH, CHARLES NANA

ART UNIT	PAPER NUMBER
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2682

DATE MAILED: 04/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/663,265

Applicant(s)

GANDHI ET AL.

Examiner

Charles Appiah

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 September 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8 and 13-16 is/are rejected.
- 7) ☒ Claim(s) 7 and 9-12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.



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APPLICATION NO./ CONTROL NO.	FILING DATE	FIRST NAMED INVENTOR / PATENT IN REEXAMINATION	ATTORNEY DOCKET NO.
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EXAMINER

ART UNIT	PAPER
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DATE MAILED:

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Commissioner of Patents and Trademarks

See attached

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2, 4, 6, 8 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by **Salonaho et al. ((WO 9824199))**.

Regarding claim 1, Salonaho discloses a method for determining when a request for higher transmission rate should be granted to a mobile station that has access to a communication system comprising the steps of: obtaining a first estimated performance indicator (forming a combined signal strength of one or more desired signals, as well as forming a combined total strength of the interference and one or more desired signals, see page 2, lines 33-36), and a second estimated performance indicator for all active connections (forming a load result measuring the load by comparing the signal strength and the total strength, page 2, line 36 to page 3, line 1), establishing a blocking threshold (load threshold value which is a predetermined measure for the highest load level allowed, see page 3, lines 2-3), and deciding whether to grant or deny the mobile station access to use the requested higher transmission

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rate based on a comparison of the first and second indicators relative to the established blocking threshold (feature of balancing load by changing telecommunication rate when the threshold means compare the load result with the threshold value and the load result and threshold value substantially differ from one another on the basis of the comparison, see page 3, lines 1-5, lines 27-36 and page 7, line 9 to page 8, line 6).

Regarding claim 2, Salonaho further shows the first and second performance indicators contain current loading and interference values (see page 5, lines 2-19).

Regarding claim 4, Salonaho's teaching of not allowing new connections to be established when the data transmission rate is decreased based on the load substantially exceeding what is allowed according to the comparison result (see page 7, line 21 to page 8, line 6) reads on wherein the deciding step comprises denying access at the requested higher transmission rate to the mobile station when the first performance indicator exceeds the blocking threshold value to avoid degradation of performance of the wireless communication system.

Regarding claim 6, Salonaho further shows the deciding step granting access to the mobile station to use the requested higher transmission rate when the first performance indicator is less than or equal to the blocking threshold (see page 8, line 7 to page 9, line 23,).

Regarding claim 8, Salonaho further shows the establishing step comprises establishing a threshold defined by a maximum blocking threshold wherein the maximum blocking threshold is set at a value, which will prevent overloading of the communication system (see page 3, lines 1-23).

Regarding claim 13, Salonaho further shows wherein the maximum blocking threshold is constant for different estimate loading values (load threshold value being predetermined, see page 6, lines 26-34).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Salonaho et al. (WO 98/24199)**.

Regarding claim 3, Salonaho meets all limitations as applied above to claim 2. Salonaho teaching as illustrated in the formula (6) (see page 9, line 21 to page 9, line 30) shows the first and second estimated performance indicators also contain changes

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in loading and interference values due to connections dropped or added, but fails to explicitly teach the connections being added or dropped prior to burst start time.

However, since it is very well known in the art that data transmissions are carried out using burst transmissions it would have been obvious to one of ordinary skill in the art to ensure taking into consideration loading and interference values due to connections being dropped or added prior to burst transmission times for the benefit of providing a dynamic load control for ensuring good quality communications.

Regarding claim 5, Salonaho meets the limitation of the deciding step granting access to use a transmission rate that is lower than the requested rate when access at the requested rate is denied (see page 6, lines 5-35).

7. Claims 14-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Salonaho et al** as applied to claim 8 above, and further in view of **Kotzin et al. (5,796,722)**.

Regarding claims 14-16, Salonaho fails to teach wherein the maximum blocking loading decreases in steps or uniformly as the loading increases. Kotzin discloses a method for dynamic load balancing in a multi-carrier wireless communication system using handoff (see col. 3, lines 16-54). According to Kotzin, a fixed threshold value may be used or alternatively the threshold may be variable depending on the system configuration and that, in communication systems, where there are periods of heavy call traffic, it may prove beneficial to use a variable threshold that would accommodate more subscribers at an albeit lower grade of service (see col. 4, lines 21-64).

It would therefore have been obvious to one of ordinary skill in the art to combine the above teaching of Kotzin by providing a variable threshold that varies as desired in the system of Salonaho, in order to account for the dynamic nature of users including accommodating more users or subscribers at lower service grades as taught by Kotzin.

Allowable Subject Matter

8. Claims 7, 9 and 10-12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Andersson et al. (6,419,461) discloses a channel-type switching from a common channel to a dedicated channel based on common channel loading. Chen et al. (6,516,196) discloses a method for increasing the performance of CDMA systems by accommodating a variety of users with different rates.

I et al. (734,646) discloses a CDMA system for allocating an increased data rate to a requesting mobile station.

Diaz et al. (5,161,154) discloses a communication system that varies the channel usage requirement to accommodate the varying needs of communication units as well as current loading conditions on an assigned resource.

Honkasalo et al. (6,219,343) discloses a rate control technique for controlling data rate allocation over a CDMA cellular communication network.

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Scholefield et al. (6,216,006) discloses a method for allowing new traffic on a wireless data network.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles Appiah whose telephone number is 703 305-4772. The examiner can normally be reached on M-F 7:30AM-5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vivian Chin can be reached on 703 305-6739. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703 308-6296 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703 306-0377.

CA
April 21, 2003


CHARLES APPIAH
PATENT EXAMINER